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EVALUATION OF MOUNTAIN PINE BEETLE INFESTATION, BELT RANGER DISTRICT LEWIS AND CLARK NATIONAL FOREST, MONTANA

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EVALUATION OF MOUNTAIN PINE BEETLE INFESTATION, BELT RANGER DISTRICT LEWIS AND CLARK NATIONAL FOREST, MONTANA 1967

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SUMMARY

A mountain pine beetle infestation in ponderosa pine, on Monarch Mountain, Belt Ranger District, Lewis and Clark National Forest was evaluated during 1967. Approximately 2,000 trees are currently infested on about 300 acres. The infestation is classed as epidemic with an increasing trend. Chemical treatment of infested trees is recommended.

INTRODUCTION

Tree killing by mountain pine beetle has steadily increased in ponderosa pine stands on the Lewis and Clark National Forest since 1963.

A chronic infestation on the south slope of Monarch Mountain near Neihart, Montana killed approximately 1,000 trees in 1964 and again in 1965. Over 1,500 trees were killed in 1966. Aerial survey observers detected 1,000 to 1,500 new "red tops" in 1967.

TECHNICAL INFORMATION

Causal agent: Mountain pine beetle, Dendroctonus ponderosae Hopkins = (monticolae Hopkins).

Host trees attacked: Ponderosa pine, Pinus ponderosa var. scopulorum Engelmann.

Type of damage: Mountain pine beetle broods kill pine trees by feeding on cambium tissue.

Location and size of outbreak: Infested groups and scattered single trees are concentrated in an area of about 300 acres on the south slope of Monarch Mountain, Belt Ranger District, Neihart, Montana (T. 15 N., R. 7 E., sec. 15).

BIOLOGICAL DATA

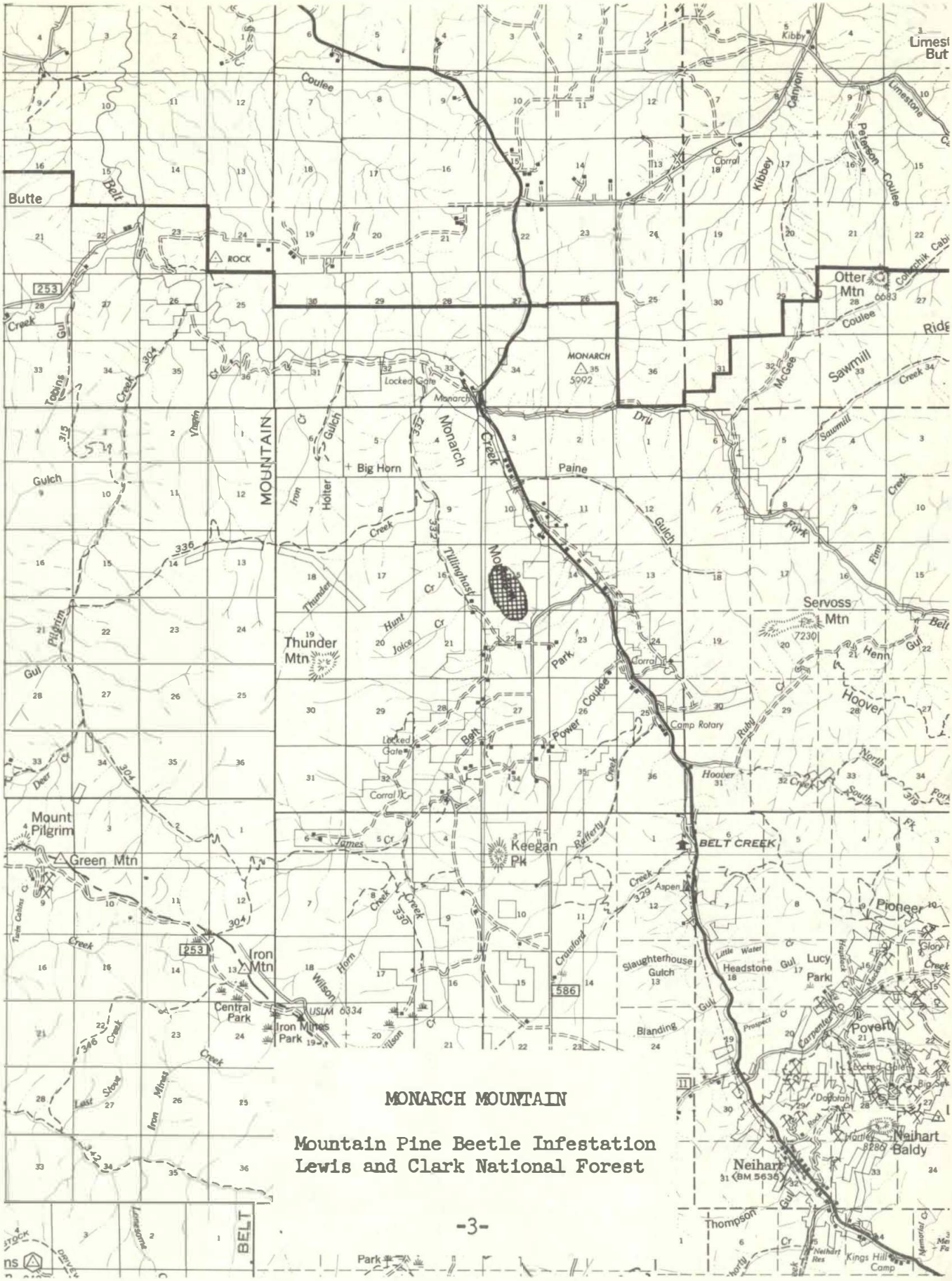
Approximately 2,000 trees are currently infested on about 300 acres. Average d.b.h. of infested trees was 13.5 inches. Ratio of new attacked trees to

trees killed last year is 1:1. Brood counts averaged 127 beetles per square foot. Very few predators or parasites were observed. These data indicate sufficient beetle populations to continue the infestation at the present epidemic level through next year.

DISCUSSION

Direct control by chemical treatment of infested trees is recommended. Chemical treatment would be the most practical and economical method of suppressing this infestation.

Logging is not practical because most timber within the Monarch Mountain area has low commercial value and a market for this size and type material is not available. The infested timber is in an area of high recreational use and esthetics are considered more important than commercial values. It is in the travel influence zone and can be viewed along U.S. 89--a highway route between Yellowstone and Glacier National Parks.



MONARCH MOUNTAIN

Mountain Pine Beetle Infestation
Lewis and Clark National Forest

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